December 20, 2001

Dave Anderson
OMCO Cast Metals, Inc.
P.O. Box 462
Winchester, Indiana 47394

Re: **135-12267**
First Significant Revision to
FESOP 135-5454-00007

Dear Mr. Anderson:

OMCO Cast Metals, Inc. was issued a permit on December 13, 1996 for a grey and ductile iron foundry. A letter requesting changes to this permit was received on May 12, 2000. Pursuant to the provisions of 326 IAC 2-8-11.1 a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The revision consists of the construction of a new sand reclaimer, and the resultant changes to the PM and PM_{10} limits.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire FESOP permit is being provided.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Edward A. Longenberger, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
EAL/MES

cc: File - Randolph County
U.S. EPA, Region V
Randolph County Health Department
Air Compliance Section Inspector - David Rice
Compliance Branch - Karen Nowak
Administrative and Development - Cynthia Bymaster
Technical Support and Modeling - Michele Boner

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

OMCO Cast Metals
900 North Main Street
Winchester, Indiana 47394

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 135-5454-00007	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 13, 1996 Expiration Date: December 13, 2001

First Administrative Amendment No.: AAF135-10039, issued on September 4, 1998
Second Administrative Amendment No.: AAF 135-10461-00007, issued on January 26, 1999

First Significant Permit Revision No.: SPR 135-12267-00007	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 20, 2001

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SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a gray and ductile iron foundry.

Responsible Official:	George C. Bowyer, Vice President and General Manager
Source Address:	900 North Main Street, Winchester, Indiana 47394
Mailing Address:	P.O. Box 462, Winchester, Indiana 47394
SIC Code:	3321 and 3322
County Location:	Randolph
County Status:	Attainment for all criteria pollutants
Source Status:	Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

(a) two (2) Brown-Boveri 9-ton electric induction furnaces, each with a maximum capacity of 4.22 tons per hour;

(b) one (1) sand return system (muller), elevator, two (2) casting shakeout lines and eight (8) conveyers, with a maximum capacity of 30 tons per hour, controlled by a 35,000 cubic feet per minute baghouse, and a 65,000 cubic feet per minute baghouse;

(c) One (1) snag grinding operation, controlled by a 7,500 cubic feet per minute baghouse;

(d) three (3) Tumble shotblasting units, identified as units 4, 5, and 7, controlled by three (3) baghouses;

(e) molding machines controlled by a 2,500 cubic feet per minute baghouse [HA-He];

(f) one (1) bond silo with a maximum capacity of 30 tons per hour, controlled by a 2,500 cubic feet per minute baghouse;

(g) two (2) - four (4) burner annealing ovens, rated at 3.4 million British thermal units per hour;

(h) one (1) five burner annealing oven, rated at 2 million British thermal units per hour;

(i) one (1) core forming line, with a maximum capacity of 30 tons of sand per hour, controlled by a cartridge filter dust collector;

(j) one (1) pepset line, with a maximum capacity of 6 tons of sand per hour, with emissions uncontrolled;

(k) one (1) inoculator, with a maximum capacity of 4.22 tons per hour, uncontrolled.

(l) The magnesium treatment process, uncontrolled, capacity: 3.35 tons of iron per hour.

(m) One (1) sand reclaimer, identified as sand reclaimer, equipped with a baghouse and exhausting to Stack P, capacity: 15,000 pounds of sand per hour.

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

(a) natural-gas fired combustion units, including one (1) natural gas-fired scrap preheat furnace;

(b) equipment powered by internal combustion engines;

(c) a gasoline fuel transfer and dispensing operation;

(d) a petroleum fuel dispensing facility;

(e) grinding and machining operations.

A.4 FESOP Applicability [326 IAC 2-8-2]
This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 General Requirements [IC 13-15] [IC 13-17] (Prior to July 1, 1996: IC 13-7 and IC 13-1-1)
The permittee shall comply with the provisions of IC 13-15 (Permits Generally), IC 13-17 (Air Pollution Control) and the rules promulgated thereunder.

B.2 Definitions [326 IAC 2-8-1]
Terms in this permit shall have the meaning assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11 (prior to July 1, 1996, IC 13-7-2, IC 13-1-1-2), 326 IAC 1-2, and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]
This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-5-5-3 (prior to July 1, 1996, IC 13-7-10-2.5), of the permit.

B.4 Enforceability [326 IAC 2-8-6]
(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.

(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9]
The expiration of this permit terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-7.

B.6 Severability [326 IAC 2-8-4(4)]
(a) The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

(b) Indiana rules from 326 IAC quoted in conditions in this permit are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
This permit does not convey any property rights of any sort or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]
(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall also provide additional information as requested by IDEM, OAQ, to determine the compliance status of the source in accordance with 326 IAC 2-8-5(a).

(c) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that the IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(d) Upon written request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. For information claimed to be confidential, the Permittee shall furnish such records directly to both the U.S. EPA and IDEM, OAQ, along with a claim of confidentiality.

Such confidentiality claims shall meet the requirements of 40 CFR Part 2, Subpart B (when submitting to U.S. EPA) and 326 IAC 17 (when submitting to IDEM, OAQ).

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) enforcement action;

(2) permit termination, revocation and reissuance or modification; and

(3) denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)]
Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

A responsible official is defined at 326 IAC 2-7-1(33).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
(a) The Permittee shall annually certify that the source has complied with the terms and conditions contained in this permit, including emission limitations, standards, and work practices. The certification shall be submitted or July 1 to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch-Indiana (AE-17J)

77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) This annual compliance certification report required by this permit shall be timely if:

(1) Delivered by U.S. mail and postmarked on or before the date it is due; or

(2) Delivered by any other method if it is received and stamped by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The identification of each term and condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;
(4) The methods used for determining the compliance status of the source, currently and over the reporting period; and

(5) Such other facts as IDEM, OAQ, may require to determine the compliance status of the source.

B.13 Preventive Maintenance Plan [326 IAC 2-8-4(9)] [326 IAC 1-6-3]

(a) The Permittee shall prepare, maintain and implement operation and Preventive Maintenance Plans as necessary including the following information on each:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Corrective actions that will be implemented in the event an inspection indicates an out of specification situation;

(4) A time schedule for taking such corrective actions including a schedule for devising additional corrective actions for situations that may not have been predicted; and

(5) Identification and quantification of the replacement parts which will be maintained in inventory for quick replacement.

(b) Preventive Maintenance Plans shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ.

B.14 Emergency Provision [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided as follows:

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the

following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements of this permit;

(4) The Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency occurrence by telephone or facsimile;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality) or,
Telephone No.: 317-233-0178
Facsimile No.: 317-233-5967

(5) The Permittee submitted written notice or by facsimile of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency. The notice shall fulfill the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined in 326 IAC 2-7-1 (C)(33).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes any emergency or upset provision contained in 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the preventive maintenance plan required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) the Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in clause (B) above.

B.15 Deviations from Permit Requirements and/or Conditions [326 IAC 2-8-4(3)(C)(ii)]
Deviations from requirements, (for emergencies see Condition B.14 - Emergency Provision) the probable cause of such deviations, and any corrective actions or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

Written notification shall be submitted on the attached Deviation Occurrence Reporting Forms.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8(a)]
[326 IAC 2-8-8(b)] [326 IAC 2-8-8(c)]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 (prior to July 1, 1996, in IC 13-7-10-5) or if the commissioner determines any of the following:

(1) That it contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practical. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include, at minimum, the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(20).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-5-3]

(1) The Permittee has a duty to submit a timely and complete permit renewal application. A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) Delivered by U. S. mail and postmarked on or before the date it is due; or

(C) Delivered by any other method if it is received and stamped by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application of Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Administrative Permit Amendment [326 IAC 2-8-10]

(a) An administrative permit amendment is a FESOP revision that makes changes of the type specified under 326 IAC 2-8-10(a).

(b) An administrative permit amendment may be made by IDEM, OAQ, consistent with the procedures specified under 326 IAC 2-8-10(b).

(c) The Permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Minor Permit Modification [326 IAC 2-8-11(a)] [326 IAC 2-8-11(b)(1) and (2)]

(a) A permit modification is any revision to this permit that cannot be accomplished as an administrative permit amendment under 326 IAC 2-8-10.

(b) Minor permit modification procedures shall follow the procedures specified under 326 IAC 2-8-11(b)(1)(A) through (F).

(c) An application requesting the use of minor modification procedures shall meet the requirements of 326 IAC 2-8-3(c) and shall include the information required in 326 IAC 2-8-11(b)(3)(A) through (D).

(d) The Permittee may make the change proposed in its minor permit modification application immediately after it files such application unless the change is subject to the construction permit requirements of 326 IAC 2-1, 326 IAC 2-2, or 326 IAC 2-3. After the Permittee makes the change allowed under minor permit modification procedures, and until IDEM, OAQ takes any of the actions specified in 326 IAC 2-8-11(b)(5), the Permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period, the Permittee need not comply with the existing permit terms and conditions it seeks to modify. If the Permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it. [326 IAC 2-8-11(b)(6)]

B.20 Significant Permit Modification [326 IAC 2-8-11(d)]

(a) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments.

(b) Any significant change in existing monitoring permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions of this permit shall be considered significant.

(c) Nothing in 326 IAC 2-8-11(d) shall be construed to preclude the Permittee from making changes consistent with 326 IAC 2-8 that would render existing permit compliance terms and conditions irrelevant.

(d) Significant modifications of this permit shall meet all requirements of 326 IAC 2-8, including those for application, public participation, and review by the U.S. EPA, as they apply to permit issuance and renewal.

B.21 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]

Notwithstanding 326 IAC 2-8-11(b)(1)(D)(i) and 326 IAC 2-8-11(c)(1), minor permit modification procedures may be used for modifications of this permit involving the use of economic incentives, marketable FESOP's, emissions trading, and other similar approaches to the extent that such minor permit modification procedures are explicitly provided for in the applicable implementation plan (SIP) or in applicable requirements promulgated by the U.S. EPA.

B.22 Operational Flexibility [326 IAC 2-8-15]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions);

(3) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch-Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1 (C)(33). The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(4) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review. Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(1), (c)(1), and (d).

(b) For each such change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

(c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints in section (a) of this condition and those in 326 IAC 2-8-15(c).

(d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7) and subject to the constraints in section (a) of this condition and those in 326 IAC 2-8-15(d).

B.23 Construction Permit Requirement [326 IAC 2-1]
Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Quality (OAQ).

B.24 Inspection and Entry [326 IAC 2-8-5(a)(2)]
Upon presentation of IDEM identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of demonstrating compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of demonstrating compliance with this permit or applicable requirements.
[326 IAC 2-8-5(a)(4)]

B.25 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

(a) The Permittee shall pay annual fees to IDEM, OAQ, consistent with the fee schedule established in 326 IAC 2-8-16.

(b) Failure to pay may result in administrative enforcement action, revocation of this permit, referral to the Office of Attorney General for collection, or other appropriate measures.

(c) The Permittee shall pay the annual fee within thirty (30) calendar days of receipt of a billing by IDEM, OAQ or in a time period that is consistent with the payment schedule issued by IDEM, OAQ.

(d) If the Permittee does not receive a bill from IDEM, OAQ, thirty (30) calendar days before due date, the Permittee shall call the following telephone numbers: 1-800-451-6027 or 317-233-0179 (ask for OAQ, Data Support Section), to determine the appropriate permit fee. The applicable fee is due April 1 of each year.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations [326 IAC 2-8-4(1)]

C.1 Overall Source Limit (326 IAC 2-8)
Pursuant to 326 IAC 2-8, emissions of any regulated pollutant from the entire source shall not exceed 99 tons per 365 day period. Emissions of hazardous air pollutants (HAPs) from the entire source shall not exceed 9 tons of any individual HAP per 365 day period or 24 tons of any combination of HAPs per 365 day period. Emissions shall include those from all emission points at the source including those that are insignificant as defined in 326 IAC 2-7-1 (20). The source shall be allowed to add insignificant activities not already listed in this permit, as long as the total emissions from the source do not exceed the above specified limits. In the event that any condition or combination of conditions in Section D of this permit differs from the above, the most restrictive limit will prevail.

C.2 Opacity
Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following:

(a) Visible emissions shall not exceed an average of 40 percent opacity in 24 consecutive readings,

(b) Visible emissions shall not exceed 60 percent opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

C.3 Open Burning
The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6.

C.4 Fugitive Dust Emissions
The Permittee shall be in violation of 326 IAC 6-4 if any of the criteria specified in 326 IAC 6-4-2 (1) through (4) are violated.

C.5 Operation of Equipment [326 IAC 2-8-5(a)(4)]

(a) All equipment that potentially might emit pollutants into the ambient air shall be properly operated and maintained.

(b) Unless otherwise stated in this permit, all air pollution control equipment listed in this permit shall be operated at all times that the emission unit(s) vented to the control equipment is in operation.

(c) The permittee shall perform all necessary maintenance and make all necessary attempts to keep all air pollution control equipment in proper operating condition at all times.

Performance Testing

C.6 Performance Testing
The Permittee shall perform the tests specified in this permit to demonstrate compliance with the applicable rule or permit condition. All testing shall be performed according to the provisions of 326 IAC 3-2.1 (Source Sampling Procedures) and by methods in the approved test protocol. The test protocol shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

at least thirty-five (35) days before the intended test date. [326 IAC 3-2.1-2(a)]

Compliance Monitoring [326 IAC 2-8-5(a)(1)]

C.7 Compliance Monitoring [326 IAC 2-8-4(3)]
Compliance with applicable requirements shall be documented in accordance with the provisions of 326 IAC 2-8-4(3). The Permittee shall be responsible for installing any necessary equipment and initiating any additional monitoring no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee shall notify:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, with full justification of the reasons for inability to meet this date and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined 326 IAC 2-7-1 (C)(33).

C.8 Pressure Gauge Specifications
Whenever a condition in this permit requires the taking of pressure drop across any part of the unit or its control device the gauge employed shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within ±2 percent of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

Corrective Actions [326 IAC 2-8-4(1)] [326 IAC 2-8-5(1)]

C.9 Failure to Take Corrective Action
For each unit for which parametric monitoring is required, appropriate corrective actions as described in the Preventive Maintenance Plan shall be taken when indicated by monitoring information. Failure to take corrective action following an excursion of a surrogate monitoring parameter within the prescribed time will constitute a violation of the permit unless taking the corrective action set forth in the Plan would be unreasonable.

After investigating the reason for the excursion, the Permittee may be excused from taking further corrective action for any of the following reasons:

(a) Providing that prompt action was taken to correct the monitoring equipment, that the monitoring equipment malfunctioned, giving a false reading; or

(b) The Permittee has determined that the parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied; or

(c) An automatic measurement was taken when the process was not operating; or

(d) The Permittee determines that the process has already returned to operating within

"normal" parameters and no corrective action is required.

Records shall be kept of all instances in which the action values were not met and of all corrective actions taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test

Whenever the results of the stack test performed in conformance with Condition C.6 - Performance Testing, of this permit exceed the level specified in any condition of this permit, appropriate corrective actions shall be submitted to IDEM-OAQ within 30 (thirty) days of receipt of the test results. These actions shall be implemented immediately unless notified by OAQ that they are not acceptable. The Permittee shall minimize emissions while the corrective actions are being implemented.

A second test to demonstrate compliance shall be performed within 120 days. Failure of the second test to demonstrate compliance may be grounds for immediate revocation of the permit to operate the affected facility.

Record Keeping and Reporting [326 IAC 2-8-4(3)]

C.11 Monitoring Data Availability

All observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions. Records shall be kept of the times that the equipment is not operating. If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality. If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded. At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed 5 percent of the operating time in any quarter. Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason.

C.12 General Record Keeping Requirements

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location and available within one hour upon verbal request of an IDEM, OAQ representative, for a minimum of three (3) years. They may be stored elsewhere for the remaining two years providing they are made available within thirty (30) days after written request.

(b) Records of required monitoring information shall include:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) All preventive maintenance and corrective actions that were implemented. Such records shall briefly describe what was done and indicate who did it;

(5) Relevant work purchases orders;

(6) Quality assurance and quality control procedures;

(7) Operator's standard operating procedures;

(8) Manufacturer's specifications or their equivalent; and

(9) Equipment "troubleshooting" guidance.

C.13 General Reporting Requirements

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be timely if:

(1) Delivered by U.S. mail and postmarked on or before the date it is due; or

(2) Delivered by any other method if it is received and stamped by IDEM, OAQ, on or before the date it is due.

(c) All instances of deviations from any requirements of this permit must be clearly identified in such reports.

(d) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.

(e) The first report shall cover the period commencing the date of issuance of this permit and ending March 31, 1997.

SECTION D.1 FACILITY OPERATION CONDITIONS

Two (2) electric induction furnaces, each with a maximum melting capacity of 3.35 tons per hour, uncontrolled and exhausting to vents A and B.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each electric induction furnace shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Metal Throughput Limit [326 IAC 2-8-4]

The total metal throughput to the two (2) electric induction furnaces shall be less than 20,240 tons per twelve (12) consecutive month period. This limit is necessary to limit PM and PM_{10} emissions such that the requirements of 327 IAC 2-7 and 326 IAC 2-2 will not apply.

D.1.3 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from either of the two (2) electric induction furnaces shall not exceed 0.86 pounds per ton of metal melted, equivalent to 8.70 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.1.4 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from either of the two (2) electric induction furnaces shall not exceed 0.90 pounds per ton of metal melted, equivalent to 9.11 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.5 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the electric induction furnaces.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.6 Quarterly Reporting

That a quarterly summary to document compliance with operation condition number D.1.2 shall be submitted to the address listed in Section C-General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

shot blasting and grinding operations, with a maximum capacity of 3.35 tons of iron per hour, with three baghouses for particulate matter control and exhausting through stacks D and E.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shot blasting and grinding operations shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the shot blasting and grinding operations after controls shall not exceed 0.017 pounds per ton of metal processed, equivalent to 0.172 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.2.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the shot blasting and grinding operations after controls shall not exceed 0.17 pounds per ton of metal processed, equivalent to 17.2 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.2.4 Pressure Readings

The Permittee shall take readings of the total static pressure drop across the three baghouses controlling this operation, at least once per working shift when the shot blasting/grinding system is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the 65,000 cfm baghouse shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test; the pressure drop across the 2,750 cfm baghouse shall be maintained within the range of 1.0 and 3.0 inches of water or a range established during the latest stack test; and the pressure drop across the 5,600 cfm baghouse shall be maintained within the range of 0.8 and 2.5 inches of water or a range established during the latest stack test. The Preventative Maintenance plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Condition C.8-Pressure Gauge Specifications, be subject to approval by IDEM, OAQ, and be calibrated at least once every six (6) months.

D.2.5 Visible Emissions Notations

Visible emission notations of the stack exhausts of each of the three baghouses controlling the shot blasting/grinding system shall be performed once per working shift. A trained employee will record

whether emission are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during the part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when abnormal emission is observed.

D.2.6 Preventive Maintenance [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the shot blasting/grinding system.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.2.7 Operational Parameters
That the Permittee shall maintain daily records at the stationary source of the following values:

(a) inlet and outlet differential static pressure; and

(b) visible observations.

D.2.8 Record Keeping
That the Permittee shall maintain records of baghouse preventative maintenance, parametric monitoring data, visible emissions observations, and all corrective actions taken and the outcome from each. These records shall be made available upon request of the Office of Air Quality (OAQ) staff.

SECTION D.3 FACILITY OPERATION CONDITIONS

the scrap and charge handling process with a maximum capacity of 3.35 tons of iron per hour, uncontrolled.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the scrap and charge handling process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.3.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the scrap and charge handling process shall not exceed 0.36 pounds per ton of metal processed, equivalent to 3.64 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.3.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the scrap and charge handling process shall not exceed 0.6 pounds per ton of metal processed, equivalent to 6.07 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.3.4 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the scrap and charge handling process.

SECTION D.4 FACILITY OPERATION CONDITIONS

The inoculation process, with a maximum capacity of 3.35 tons of iron per hour.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the inoculation process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.4.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the inoculation process shall not exceed 1.24 pounds per ton of metal processed, equivalent to 12.5 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.4.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the inoculation process shall not exceed 1.24 pounds per ton of metal processed, equivalent to 12.5 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.4.4 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the inoculation process.

SECTION D.5 FACILITY OPERATION CONDITIONS

the pouring/casting process with a maximum capacity of 3.35 tons per hour, uncontrolled and exhausting internally.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.5.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the pouring/casting process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.5.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the pouring/casting process shall not exceed 2.8 pounds per ton of metal processed, equivalent to 28.3 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.5.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the pouring/casting process shall not exceed 2.8 pounds per ton of metal processed, equivalent to 28.3 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.5.4 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the pouring/casting process.

SECTION D.6 FACILITY OPERATION CONDITIONS

the castings cooling process with a maximum capacity of 3.35 tons per hour, uncontrolled and exhausting internally.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.6.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the castings cooling process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.6.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the castings cooling process shall not exceed 1.4 pounds per ton of metal processed, equivalent to 14.17 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.6.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the castings cooling process shall not exceed 1.4 pounds per ton of metal processed, equivalent to 14.17 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.6.4 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the castings cooling process.

SECTION D.7 FACILITY OPERATION CONDITIONS

the sand handling process (muller), elevator, two (2) casting shakeout lines, eight (8) conveyers, and the mold making process with a maximum capacity of 30 tons of sand per hour, controlled by a 35,000 cubic feet per minute baghouse and a 65,000 cubic feet per minute baghouse.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.7.1 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the sand handling process shall not exceed 40.0 pounds per hour when operating at a process weight rate of 30 tons per hour.

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the castings shakeout process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

(c) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the mold making process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.7.2 Sand Throughput Limit [326 IAC 2-8-4]

The total amount of sand delivered to the sand handling process shall be less than 144,014 tons per twelve (12) consecutive month period.

D.7.3 Particulate Matter (PM) [326 IAC 2-2]

(a) The PM emission rate from the sand handling process after controls shall not exceed 0.0065 pounds per ton of sand handled, equivalent to 0.468 tons of PM per year at the throughput limit of 144,014 tons of sand delivered to the sand handling process per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

(b) The PM emission rate from the castings shakeout process after control shall not exceed 0.064 pounds per ton of metal processed, equivalent to 0.648 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

(c) The PM emission rate from the mold making process after control shall not exceed 0.011 pounds per ton of metal processed, equivalent to 0.111 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

(d) The combined PM emissions from the three (3) operations shall not exceed that calculated by the combination of the emission factors after control and the metal and/or sand throughput.

D.7.4 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

(a) The PM_{10} emission rate from the sand handling process after controls shall not exceed 0.0054 pounds per ton of sand handled, equivalent to 0.389 tons of PM_{10} per year at the throughput limit of 144,014 tons of sand delivered to the sand handling process per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

(b) The PM_{10} emission rate from the castings shakeout process after control shall not exceed 0.0448 pounds per ton of metal processed, equivalent to 0.453 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

(c) The PM_{10} emission rate from the mold making process after control shall not exceed 0.011 pounds per ton of metal processed, equivalent to 0.111 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

(d) The combined PM_{10} emissions from the three (3) operations shall not exceed that calculated by the combination of the emission factors after control and the metal and/or sand throughput.

Testing Requirements [326 IAC 2-8-4(3)]

D.7.5 Particulate Matter less than ten microns (PM10) and PM

That during the period between 24 months and 36 months after issuance of this permit, the Permittee shall perform PM10 and PM testing on the 65,000 cubic feet per minute baghouse and the 35,000 cubic feet per minute baghouse controlling the sand handling process utilizing methods per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202, as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM10 includes filterable and condensible PM10.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.7.6 Pressure Readings

The Permittee shall take readings of the total static pressure drop across the 35,000 cubic feet per minute baghouse and the 65,000 cubic feet per minute baghouse controlling this operation, at least once per working shift when the sand handling process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the 65,000 cfm baghouse shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test; and the pressure drop across the 35,000 cfm baghouse shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test. The Preventative Maintenance plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Condition C.8-Pressure Gauge Specifications, be subject to approval by IDEM, OAQ, and be calibrated at least once every six (6) months.

D.7.7 Visible Emissions Notations

Visible emission notations of the 35,000 cubic feet per minute baghouse and the 65,000 cubic feet per minute baghouse stack exhausts shall be performed once per working shift. A trained employee will record whether emission are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or

discontinuous operations, readings shall be taken during the part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when abnormal emission is observed.

D.7.8 Preventive Maintenance [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the sand handling process, mold making process, and all baghouses controlling this process.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.7.9 Operational Parameters
That the Permittee shall maintain daily records at the stationary source of the following values:

(a) inlet and outlet differential static pressure;

(b) visible observations.

D.7.10 Record Keeping
(a) In order to show compliance with Condition D.7.2, the Permittee shall maintain monthly records of the total amount of sand delivered to the sand handling process.

(b) That the Permittee shall maintain records of baghouse preventative maintenance, parametric monitoring data, visible emissions observations, and all corrective actions taken and the outcome from each. These records shall be made available upon request of the Office of Air Management (OAM) staff.

D.7.11 Reporting Requirements
A quarterly summary of the information to document compliance with Condition D.7.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

SECTION D.8 FACILITY OPERATION CONDITIONS

the core making process with a maximum capacity of 3.35 tons of iron per hour, controlled by a cartridge filter dust collector.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.8.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the core making process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.8.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the core making process after controls shall not exceed 0.011 pounds per ton of metal processed, equivalent to 0.111 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.8.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the core making process after controls shall not exceed 0.011 pounds per ton of metal processed, equivalent to 0.111 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.8.4 Visible Emissions Notations

Visible emission notations of the dust collector stack exhaust shall be performed once per working shift. A trained employee will record whether emission are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during the part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when abnormal emission is observed.

D.8.5 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the core making process.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.8.6 Operational Parameters

That the Permittee shall maintain daily records at the stationary source of the visible emission

observations.

D.8.7 Record Keeping

That the Permittee shall maintain records of visible emissions observations, and all corrective actions taken and the outcome from each. These records shall be made available upon request of the Office of Air Quality (OAQ) staff.

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

The magnesium treatment process, uncontrolled, capacity: 3.35 tons of iron per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.9.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the magnesium treatment process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.9.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the magnesium treatment process shall not exceed 1.8 pounds per ton of metal processed, equivalent to 18.22 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.9.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the magnesium treatment process shall not exceed 1.8 pounds per ton of metal processed, equivalent to 18.22 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

D.9.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

There are no specific Compliance Determination Requirements applicable to these emission units.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

SECTION D.10 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

One (1) sand reclaimer, identified as sand reclaimer, equipped with a baghouse and exhausting to Stack P, capacity: 15,000 pounds of sand per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.10.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the one (1) sand reclaimer shall not exceed 15.8 pounds per hour when operating at a process weight rate of 15,000 pounds per hour (7.5 tons per hour).

This limitation is based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.10.2 Particulate Matter (PM_{10}) [326 IAC 2-2][326 IAC 2-8-4]

The PM_{10} emissions from the one (1) sand reclaimer shall be less than 1.50 pounds per hour, equivalent to 6.57 tons per year. Compliance with this condition will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70 Permits), not applicable.

D.10.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emissions from the one (1) sand reclaimer shall be less than 1.50 pounds per hour, equivalent to 6.57 tons per year. Compliance with this condition will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.10.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.10.5 Particulate Matter (PM)

In order to comply with Conditions D.10.1, D.10.2 and D.10.3, the baghouse for PM control shall be in operation at all times when the one (1) sand reclaimer is in operation.

D.10.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 60 and 180 days after achieving the maximum operation rate at which the sand reclaimer will be operated, in order to demonstrate compliance with Conditions D.10.1, D.10.2 and D.10.3, the Permittee shall perform PM and PM_{10} testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.10.7 Visible Emissions Notations

(a) Visible emission notations of the sand reclaimer exhaust (Stack P) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.10.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the sand reclaimer, at least once per shift when the sand reclaimer is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the 2,750 cfm baghouse shall be maintained within the range of 1.0 to 3.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.10.9 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the sand reclaimer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.10.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described

in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.10.11 Record Keeping Requirements

(a) To document compliance with Condition D.10.6, the Permittee shall maintain records of daily visible emission notations of the sand reclaimer stack exhaust (Stack P).

(b) To document compliance with Condition D.10.7, the Permittee shall maintain the following:

(1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle operation.

(2) Documentation of the dates vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

State Form 47738 (5-96)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: OMCO Cast Metals
Source Address: 900 North Main Street, Winchester, Indiana 47394
FESOP No.: F135-5454-00007

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Deviation Occurrence Reporting Form (For Control Equipment Monitoring)

9 Deviation Occurrence Reporting Form (For Material Usage, Quality, Etc.)

9 Relocation Notification

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

State Form 47739 (5-96)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
DEVIATION OCCURRENCE REPORT
(For Control Equipment Monitoring Only)

Source Name: OMCO Cast Metals
Source Address: 900 North Main Street, Winchester, Indiana 47394
FESOP No.: F135-5454-00007

A separate copy of this report must be submitted for **each** monitoring device on all control equipment listed in this permit. Attach a signed certification to complete this report.

Stack/Vent ID:
Control Equipment: (ex: thermal oxidizer, scrubber, baghouses)
Type of Parameter Monitored: (ex: temperature, pressure drop, efficiency)
9 Continuously **9** Periodically, at a frequency of:
Parameter Operating Restrictions/Range: (ex: 1,400^{0}F, 2-4 psi pressure drop)
Report Covers From: To: (date: month/day/yr)
9 No Deviations from the Parameter Restriction/Range Occurred During the Monitoring Period. Complete Records Maintained at the Facility Verify Compliance with this Condition.
9 Summary of Deviations from the Parameter Restriction/Range During the Monitoring Period are Identified Below. Complete Records Maintained at the Facility.

	For Parameter Recorded Continuously	For Parameter Recorded Periodically
Total Unit Operating Time		
Total Time of Deviations (Identify All Deviations)		
Percent of Time Indicating Deviations ([2]/[1]x100)		

Date of Deviation	Start/Stop Time of Deviation (Continuous Monitoring Only)	Actual Value Recorded	Reason for Deviation & Corrective Action Taken

State Form 47741 (5-96)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
DEVIATION OCCURRENCE REPORT

Source Name: OMCO Cast Metals
Source Address: 900 North Main Street, Winchester, Indiana 47394
FESOP No.: F135-5454-00007

A separate copy of this report must be submitted for **each** material type, quantity usage and operation limitation (except control equipment monitoring) listed in this permit .
Attach a signed certification to complete this report.

Stack/Vent ID:
Equipment/Operation:
Parameter Subject to Material Type, Quantity Usage or Operation Limitations Specified in the Permit: (ex: 2500 lb/day, 300 hours/yr, 5000 gallons/month)
Determination Period for this Parameter: (ex: 365-day rolling sum, fixed monthly rate)
9 Permit Has No Rate Limitations for this Parameter.
Content Restriction for this Parameter: (ex: maximum of 40 percent VOC in inks, 0.5 percent sulfur content)
Demonstration Method for this Parameter: (ex: MSDS, Supplier, material sampling & analysis)
9 Permit Has No Content Limitations for this Parameter.
Comments:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FESOP Quarterly Report

Source Name: OMCO Cast Metals, Inc.
Source Address: 900 North Main Street, Winchester, Indiana
Mailing Address: P.O. Box 462, Winchester, Indiana 47394
FESOP No.: 135-14182-00007
Facility: two (2) electric induction furnaces
Parameter: total metal throughput
Limit: less than 20,240 tons per twelve (12) consecutive month period

YEAR: _____

Month	total metal throughput (tons)	total metal throughput (tons)	total metal throughput (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FESOP Quarterly Report

Source Name: OMCO Cast Metals, Inc.
Source Address: 900 North Main Street, Winchester, Indiana
Mailing Address: P.O. Box 462, Winchester, Indiana 47394
FESOP No.: 135-14182-00007
Facility: Sand handling process
Parameter: Total amount of sand delivered to the sand handling process
Limit: Less than 144,014 tons per twelve (12) consecutive month period

YEAR: _____

Month	Total amount of sand delivered (tons)	Total amount of sand delivered (tons)	Total amount of sand delivered (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

Source Name:	**OMCO Cast Metals, Inc.**
Source Location:	**900 North Main Street, Winchester, Indiana 47394**
County:	**Randolph**
SIC Code:	**3321 and 3322**
Operation Permit No.:	**F 135-5454-00007**
Significant Permit Revision No.:	**SPR 135-12267-00007**
Permit Reviewer:	**Edward A. Longenberger**

On September 17, 2001, the Office of Air Quality (OAQ) had a notice published in the News-Gazette, Winchester, Indiana, stating that OMCO Cast Metals, Inc. had applied for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP) to operate a sand reclaimer with a baghouse as control. The notice also stated that OAQ proposed to issue a Significant Minor Permit Revision to a FESOP for this operation and provided information on how the public could review the proposed Significant Permit Revision to a FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Permit Revision to a FESOP should be issued as proposed.

On October 17, 2001, Jennifer Fanson of Astbury Environmental Engineering (AEE), on behalf of OMCO Cast Metals, Inc., submitted comments on the proposed Significant Permit Revision to a FESOP. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded.**

Comment 1:

AEE requests that the description of each facility covered by the permit be revised to detail the equipment that comprises each facility. Suggestions for improving the facility descriptions were submitted.

Response 1:

OMCO Cast Metals, Inc. submitted an application for a FESOP renewal on March 14, 2001, and the renewal is currently being processed. After further discussion with the applicant, it was agreed that this matter would best be handled in the upcoming FESOP renewal. No change was made to the permit as a result of this comment.

Comment 2:

Certain pressure drop specifications given in the permit are incorrect or incomplete. Note that more than one pressure drop must be specified for certain Sections, as some permit Sections encompass multiple baghouses.

Response 2:

The following Compliance Monitoring conditions have been changed to state the correct pressure drop readings for the baghouses at this source:

D.2.4 Pressure Readings

The Permittee shall take readings of the total static pressure drop across the three baghouses controlling this operation, at least once per working shift when the shot blasting/grinding system is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, ~~the pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.0 inches of water or a range established during the latest stack test~~ **the pressure drop across the 65,000 cfm baghouse shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test; the pressure drop across the 2,750 cfm baghouse shall be maintained within the range of 1.0 and 3.0 inches of water or a range established during the latest stack test; and the pressure drop across the 5,600 cfm baghouse shall be maintained within the range of 0.8 and 2.5 inches of water or a range established during the latest stack test**. The Preventative Maintenance plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside the above mentioned range for any one reading.

D.7.6 Pressure Readings

The Permittee shall take readings of the total static pressure drop across the 35,000 cubic feet per minute baghouse and the 65,000 cubic feet per minute baghouse controlling this operation, at least once per working shift when the sand handling process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the **65,000 cfm** baghouse shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test**; and the pressure drop across the 35,000 cfm baghouse shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test**. The Preventative Maintenance plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside the above mentioned range for any one reading.

D.10.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the sand reclaimer, at least once per shift when the sand reclaimer is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the **2,750 cfm** baghouse shall be maintained within the range of **1.0** ~~0.5~~ to **3.0** ~~6.0~~ inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Comment 3:

AEE requests that for clarity, permit Section D.9 be incorporated into Section D.4. The magnesium treatment process is synonymous with the inoculation process.

Response 3:

After further discussion with AEE, it was agreed that this matter would best be handled in the upcoming FESOP renewal. No change was made to the permit as a result of this comment.

Comment 4:

AEE has chosen to recalculate emissions for the modification based on AP-42 emission factors. Because of this, AEE requests that the requirement for stack testing be dropped from Section D.10 of the permit, particularly in light of the fact that the modification will be controlled by an existing baghouse.

Response 4:

The controlled emissions from the proposed sand reclaimer were previously calculated using estimated outlet grain loading for the baghouse. The estimated outlet grain loading combined with the flow rate resulted in the following estimate of PM and PM_{10} emissions:

6.57 tons/yr PM and 6.57 tons/yr PM_{10}

Based on the standard AP-42 emission factors for sand handling, the emissions from the proposed sand reclaimer are now calculated to be:

0.213 tons/yr PM and 0.177 tons/yr PM_{10}

These emissions will still allow the source to retain its Minor PSD status and its FESOP status.

However, the requirement to perform stack testing for PM and PM_{10} is still required, because the emission unit must utilize a control device to satisfy the total source PM_{10} limit of one hundred (100) tons per year. Therefore, no change to the permit was made as a result of this comment.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	**OMCO Cast Metals, Inc.**
Source Location:	**900 North Main Street, Winchester, Indiana 47394**
County:	**Randolph**
SIC Code:	**3321 and 3322**
Operation Permit No.:	**F 135-5454-00007**
Operation Permit Issuance Date:	**December 13, 1996**
Significant Permit Revision No.:	**SPR 135-12267-00007**
Permit Reviewer:	**Edward A. Longenberger**

The Office of Air Quality (OAQ) has reviewed a significant permit revision application from OMCO Cast Metals, Inc. relating to the construction and operation of the following emission unit and pollution control device:

One (1) sand reclaimer, identified as sand reclaimer, equipped with a baghouse and exhausting to Stack P, capacity: 15,000 pounds of sand per hour.

History

On May 12, 2000, OMCO Cast Metals, Inc. submitted an application to the OAQ requesting to add a sand reclaimer to their existing plant. OMCO Cast Metals, Inc. was issued a Federally Enforceable State Operating Permit (FESOP) on December 13, 1996.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
P	Sand Reclaimer	40	1.6	2,500	100

Recommendation

The staff recommends to the Commissioner that the FESOP Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 12, 2000. Additional information was received on March 9, 2001, August 2, 2001 and September 4, 2001.

Emission Calculations

See page 1 of 4 of Appendix A of this document for detailed emissions calculations.

Potential To Emit of Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls for this revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	**Potential To Emit** (tons/year)
PM	131
PM_{10}	131
SO_2	-
VOC	-
CO	-
NO_X	-

HAPs	**Potential To Emit** (tons/year)
TOTAL	-

Justification for Revision

The FESOP is being revised through a FESOP Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2-8-11.1(f)(1) since the potential to emit PM and PM_{10} from this revision is greater than twenty five (25) tons per year.

County Attainment Status

The source is located in Randolph County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Randolph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Randolph County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 100
PM_{10}	less than 100
SO_2	less than 100
VOC	less than 100
CO	less than 100
NO_X	less than 100

(a) This existing source is not a major stationary source because although it is one of the 28 listed source categories, no attainment regulated pollutant is emitted at a rate of 100 tons per year or more.

(b) These emissions are based upon FESOP 135-5454-00007, issued on December 13, 1996.

Potential to Emit of Revision After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this FESOP revision.

	Potential to Emit (tons/year)						
Process/facility	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_x**	**HAPs**
Proposed Revision	6.57	6.57	-	-	-	-	-
PSD Threshold Level	100	100	100	100	100	100	-

This revision to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

This grey and ductile iron foundry is one of the 28 listed PSD source categories (secondary metal production). Therefore, in order to comply with 326 IAC 2-8 (FESOP), and in order to be a minor PSD source, PM and PM_{10} emissions must be limited to less than one hundred (100) tons per year.

During the review of this proposed revision, it was discovered that the existing FESOP limits did not account for the PM and PM_{10} emissions from the magnesium treatment line. Furthermore, the PM and PM_{10} limits, when extrapolated to 8760 hours per year, did not limit PM and PM_{10} emissions to less than one hundred (100) tons per year. Therefore, it was necessary to revise all existing PM and PM_{10} limits in order to accommodate the emissions from the proposed sand reclaimer, and to ensure that PM and PM_{10} emissions are limited to less than one hundred (100) tons per year.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed revision.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed revision.

State Rule Applicability - Individual Facilities

326 IAC 2-8 (FESOP)

Pursuant to 326 IAC 2-8-4, PM and PM_{10} emissions from the one (1) sand reclaimer must be less than 1.50 pounds per hour, equivalent to 6.57 tons per year, in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70 Permits), not applicable.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the one (1) sand reclaimer shall not exceed 15.8 pounds per hour when operating at a process weight rate of 15,000 pounds per hour (7.5 tons per hour).

This limitation is based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and

P = process weight rate in tons per hour

The PM emissions from the one (1) sand reclaimer after controls are 1.50 pounds per hour, which is less than the allowable PM emission rate of 15.8 pounds per hour. Therefore, the one (1) sand reclaimer will be in compliance with this rule.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The sand reclaimer has applicable compliance monitoring conditions as specified below:

(a) Visible emissions notations of the sand reclaimer exhaust (Stack P) shall be performed once per shift during normal daylight operations when venting to the atmosphere. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(b) The Permittee shall record the total static pressure drop across the baghouse controlling the sand reclaimer, at least once per shift when the sand reclaimer is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

(c) An inspection shall be performed each calender quarter of all bags controlling the sand reclaimer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

(d) In the event that bag failure has been observed:

(1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion.

(2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(e) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the baghouse for the sand reclaimer must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

Testing Requirements

PM and PM_{10} testing is required during the period between 60 and 180 days after achieving the maximum operation rate at which the sand reclaimer will be operated, in order to demonstrate compliance with 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 2-8 (FESOP) and 326 IAC 6-3-2 (Process Operations).

Proposed Changes

This grey and ductile iron foundry is one of the 28 listed PSD source categories (secondary metal production). Therefore, in order to comply with 326 IAC 2-8 (FESOP), and in order to be a minor PSD source, PM and PM_{10} emissions must be limited to less than one hundred (100) tons per year.

During the review of this proposed revision, it was discovered that the existing FESOP limits did not account for the PM and PM_{10} emissions from the magnesium treatment line. Furthermore, the PM and PM_{10} limits, when extrapolated to 8760 hours per year, did not limit PM and PM_{10} emissions to less than one hundred (100) tons per year. Therefore, it was necessary to revise all existing PM and PM_{10} limits in order to accommodate the emissions from the proposed sand reclaimer, and to ensure that PM and PM_{10} emissions are limited to less than one hundred (100) tons per year.

Summary of Changes

(a) The metal throughput limit in Section D.1 and the sand throughput limit in Section D.7 were adjusted.

(b) The 326 IAC 6-3-2 allowable PM emission rates in Sections D.1 through D.8 were changed to reflect the hourly allowable emission rate from each process.

(c) The PM and PM_{10} limits in Sections D.1 through D.8 were changed from hourly limits to pounds per ton emission factors combined with an annual throughput limit.

(d) Section D.9 was added for the magnesium treatment line.

(e) Section D.10 was added for the proposed sand reclaimer.

(f) The quarterly reporting form for the metal throughput limit was changed, and a quarterly report form was added for the sand throughput limit.

(g) All references to the Office of Air Management or OAM in the permit have been changed to Office of Air Quality or OAQ.

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in bold):

A.2 Emission Units and Pollution Control Summary
The stationary source consists of the following emission units and pollution control devices:

(l) The magnesium treatment process, uncontrolled, capacity: 3.35 tons of iron per hour.

Note: The magnesium treatment is not new equipment, it was mistakenly left out of the original FESOP.

(m) One (1) sand reclaimer, identified as sand reclaimer, equipped with a baghouse and exhausting to Stack P, capacity: 15,000 pounds of sand per hour.

SECTION D.1 FACILITY OPERATION CONDITIONS

Two (2) electric induction furnaces, each with a maximum melting capacity of 3.35 tons per hour, uncontrolled and exhausting to vents A and B.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.1.1 Particulate Matter **(PM) [326 IAC 6-3-2]**
~~That pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the melting operation shall not exceed 3.01 pounds per hour.~~
Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each electric induction furnace shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

~~D.1.2 Particulate Matter less than 10 Microns (PM10)~~
~~That pursuant to 326 IAC 2-8-4 (FESOP), the metal throughput to the furnaces shall be limited to 1904.6 tons per month. The PM10 emissions from the melting process shall not exceed 2.88 pounds per hour. This limit is necessary in order to limit the PM10 emissions to less than 8.25 tons~~

~~per month, therefore the requirements of 326 IAC 2-7 (Part 70) will not apply.~~

D.1.2 Metal Throughput Limit [326 IAC 2-8-4]

The total metal throughput to the two (2) electric induction furnaces shall be less than 20,240 tons per twelve (12) consecutive month period. This limit is necessary to limit PM and PM_{10} emissions such that the requirements of 327 IAC 2-7 and 326 IAC 2-2 will not apply.

Note: The metal throughput limit in Condition D.1.2 was revised in order to ensure that PM and PM_{10} emissions from the entire source, including those from the proposed sand reclaimer, will each be limited to less than one hundred (100) tons per year.

D.1.3 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from either of the two (2) electric induction furnaces shall not exceed 0.86 pounds per ton of metal melted, equivalent to 8.70 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.1.4 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from either of the two (2) electric induction furnaces shall not exceed 0.90 pounds per ton of metal melted, equivalent to 9.11 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.**5**~~3~~ Preventive Maintenance [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the electric induction furnaces.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.**6**~~4~~ Quarterly Reporting
That a quarterly summary to document compliance with operation condition number D.1.2 shall be submitted to the address listed in Section C-General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

shot blasting and grinding operations, with a maximum capacity of 3.35 tons of iron per hour, with three baghouses for particulate matter control and exhausting through stacks D and E.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.2.1 Particulate Matter **[326 IAC 6-3-2]**
~~That pursuant to 326 IAC 6-3, the three baghouses shall be in operation at all times that the shotblasting and grinding operations are in operation and the particulate matter emissions from the shot blasting and grinding operations shall not exceed 0.57 pounds per hour.~~ **Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shot blasting and grinding operations shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.**

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

~~D.2.2 Particulate Matter less than 10 Microns (PM10)~~

~~Pursuant to 326 IAC 2-8 (FESOP), the PM10 emissions from the shotblasting and grinding operations shall not exceed 0.06 pounds per hour. This emission limit is necessary to limit the total PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.~~

D.2.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the shot blasting and grinding operations after controls shall not exceed 0.017 pounds per ton of metal processed, equivalent to 0.172 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.2.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the shot blasting and grinding operations after controls shall not exceed 0.17 pounds per ton of metal processed, equivalent to 17.2 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.2.**4**~~3~~ Pressure Readings

The Permittee shall take readings of the total static pressure drop across the three baghouses controlling this operation, at least once per working shift when the shot blasting/grinding system is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 3.0 inches of water or a range established during the latest stack test. The Preventative Maintenance plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Condition C.8-Pressure Gauge Specifications, be subject to approval by IDEM, OAM, and be calibrated at least once every six (6) months.

D.2.**5**~~4~~ Visible Emissions Notations

Visible emission notations of the stack exhausts of each of the three baghouses controlling the shot blasting/grinding system shall be performed once per working shift. A trained employee will record whether emission are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during the part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when abnormal emission is observed.

D.2.**6**~~5~~ Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the shot blasting/grinding system.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.2.~~7~~**6** Operational Parameters
That the Permittee shall maintain daily records at the stationary source of the following values:

(a) inlet and outlet differential static pressure; and

(b) visible observations.

D.2.~~8~~**7** Record Keeping
That the Permittee shall maintain records of baghouse preventative maintenance, parametric monitoring data, visible emissions observations, and all corrective actions taken and the outcome from each. These records shall be made available upon request of the Office of Air Management (OAM) staff.

SECTION D.3 FACILITY OPERATION CONDITIONS

the scrap and charge handling process with a maximum capacity of 3.35 tons of iron per hour, uncontrolled.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

~~D.3.1 Particulate Matter~~ **(PM) [326 IAC 6-3-2]**
~~That pursuant to 326 IAC 6-3, the particulate matter emissions from the scrap and charge handling operation shall not exceed 2.01 pounds per hour.~~ **Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the scrap and charge handling process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.**

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

~~D.3.2 Particulate Matter less than 10 Microns (PM10)~~
~~Pursuant to 326 IAC 2-8 (FESOP), the PM10 emissions from the scrap and charge handling process shall not exceed 1.20 pounds per hour. This emission limit is necessary to limit the total PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.~~

D.3.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4][326 IAC 2-2]

The PM_{10} emission rate from the scrap and charge handling process shall not exceed 0.36 pounds per ton of metal processed, equivalent to 3.64 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.3.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the scrap and charge handling process shall not exceed 0.6 pounds per ton of metal processed, equivalent to 6.07 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the

requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.3.~~4~~3 Preventive Maintenance [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the scrap and charge handling process.

SECTION D.4 FACILITY OPERATION CONDITIONS

The inoculation process, with a maximum capacity of 3.35 tons of iron per hour.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.4.1 Particulate Matter **(PM) [326 IAC 6-3-2]**
~~That pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the inoculation process shall not exceed 4.15 pounds per hour.~~ **Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the inoculation process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.**

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

~~D.4.2 Particulate Matter less than 10 Microns (PM10)~~
~~Pursuant to 326 IAC 2-8 (FESOP), the PM10 emissions from the inoculation process shall not exceed 4.15 pounds per hour. This emission limit is necessary to limit the total PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.~~

D.4.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]
The PM_{10} emission rate from the inoculation process shall not exceed 1.24 pounds per ton of metal processed, equivalent to 12.5 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.4.3 Particulate Matter (PM) [326 IAC 2-2]
The PM emission rate from the inoculation process shall not exceed 1.24 pounds per ton of metal processed, equivalent to 12.5 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.4.~~4~~3 Preventive Maintenance [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the inoculation process.

SECTION D.5 FACILITY OPERATION CONDITIONS

the pouring/casting process with a maximum capacity of 3.35 tons per hour, uncontrolled and exhausting internally.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.5.1 Particulate Matter **(PM) [326 IAC 6-3-2]**

~~That pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the pouring/casting process shall not exceed 9.38 pounds per hour.~~ **Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the pouring/casting process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.**

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

~~D.5.2 Particulate Matter less than 10 Microns (PM10)~~

~~Pursuant to 326 IAC 2-8 (FESOP), the PM10 emissions from the pouring/casting process shall not exceed 9.38 pounds per hour. This emission limit is necessary to limit the total PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.~~

D.5.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the pouring/casting process shall not exceed 2.8 pounds per ton of metal processed, equivalent to 28.3 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.5.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the pouring/casting process shall not exceed 2.8 pounds per ton of metal processed, equivalent to 28.3 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.5.~~4~~3 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the pouring/casting process.

SECTION D.6 FACILITY OPERATION CONDITIONS

the castings cooling process with a maximum capacity of 3.35 tons per hour, uncontrolled and exhausting internally.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.6.1 Particulate Matter

~~That pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the castings cooling process shall not exceed 4.69 pounds per hour.~~ **Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the castings cooling process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.**

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

~~D.6.2 Particulate Matter less than 10 Microns (PM10)~~

~~Pursuant to 326 IAC 2-8 (FESOP), the PM10 emissions from the castings cooling process shall not exceed 4.69 pounds per hour. This emission limit is necessary to limit the total PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.~~

D.6.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the castings cooling process shall not exceed 1.4 pounds per ton of metal processed, equivalent to 14.17 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.6.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the castings cooling process shall not exceed 1.4 pounds per ton of metal processed, equivalent to 14.17 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.6.~~4~~3 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the castings cooling process.

SECTION D.7 FACILITY OPERATION CONDITIONS

the sand handling process (muller), elevator, two (2) casting shakeout lines, eight (8) conveyers, and the mold making process with a maximum capacity of 30 tons of sand per hour, controlled by a 35,000 cubic feet per minute baghouse and a 65,000 cubic feet per minute baghouse.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.7.1 Particulate Matter

~~That pursuant to 326 IAC 6-3 (Process Operations) the following conditions shall apply:~~

~~(a) The baghouse shall be in operation at all times when the sand handling process is in operation, particulate matter emissions from the sand handling process shall not exceed 0.20 pound per hour.~~

~~(b) The baghouse shall be in operation at all times when the castings shakeout process is in operation, particulate matter emissions from the castings shakeout process shall not exceed 0.21 pound per hour.~~

~~(c) The particulate matter emissions from the mold making process shall not exceed 0.04 pounds per hour.~~

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the sand handling process shall not exceed 40.0 pounds per hour when operating at a process weight rate of 30 tons per hour.

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the castings shakeout process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

(c) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the mold making process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ **where E = rate of emission in pounds per hour; and**
P = process weight rate in tons per hour

D.7.2 Sand Throughput Limit [326 IAC 2-8-4]

The total amount of sand delivered to the sand handling process shall be less than 144,014 tons per twelve (12) consecutive month period.

D.7.3 Particulate Matter (PM) [326 IAC 2-2]

(a) The PM emission rate from the sand handling process after controls shall not exceed 0.0065 pounds per ton of sand handled, equivalent to 0.468 tons of PM per year at the throughput limit of 144,014 tons of sand delivered to the sand handling process per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

(b) The PM emission rate from the castings shakeout process after control shall not exceed 0.064 pounds per ton of metal processed, equivalent to 0.648 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

(c) The PM emission rate from the mold making process after control shall not exceed 0.011 pounds per ton of metal processed, equivalent to 0.111 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

(d) The combined PM emissions from the three (3) operations shall not exceed that calculated by the combination of the emission factors after control and the metal and/or sand throughput.

~~D.7.2 Particulate Matter less than 10 Microns~~

~~Pursuant to 326 IAC 2-8 (FESOP) and 326 IAC 2-2 (Prevention of Significant Deterioration) the following conditions shall apply:~~

~~(a) The amount of sand delivered to the sand handling process shall be limited to 11,998.9 tons of sand per month. The PM10 emissions from the baghouse controlling the sand handling process shall not exceed 0.16 pounds per hour.~~

~~(b) The PM10 emissions from the castings shakeout process shall not exceed 0.15 pounds per hour.~~

~~(c) The PM10 emissions from the mold making process shall not exceed 0.04 pounds per hour.~~

~~These emission limits are necessary to limit the total PM10 emissions to 8.25 tons per month. Compliance with these conditions will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70 Permits), not applicable.~~

D.7.4 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

(a) The PM_{10} emission rate from the sand handling process after controls shall not exceed 0.0054 pounds per ton of sand handled, equivalent to 0.389 tons of PM_{10} per year at the throughput limit of 144,014 tons of sand delivered to the sand handling process per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

(b) The PM_{10} emission rate from the castings shakeout process after control shall not exceed 0.0448 pounds per ton of metal processed, equivalent to 0.453 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

(c) The PM_{10} emission rate from the mold making process after control shall not exceed 0.011 pounds per ton of metal processed, equivalent to 0.111 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

(d) The combined PM_{10} emissions from the three (3) operations shall not exceed that calculated by the combination of the emission factors after control and the metal and/or sand throughput.

Testing Requirements [326 IAC 2-8-4(3)]

D.7.~~5~~**3** Particulate Matter less than ten microns (PM10) and PM

That during the period between 24 months and 36 months after issuance of this permit, the Permittee shall perform PM10 and PM testing on the 65,000 cubic feet per minute baghouse and the 35,000 cubic feet per minute baghouse controlling the sand handling process utilizing methods per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202, as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM10 includes filterable and condensible PM10.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.7.**6**~~4~~ Pressure Readings

The Permittee shall take readings of the total static pressure drop across the 35,000 cubic feet per minute baghouse and the 65,000 cubic feet per minute baghouse controlling this operation, at least once per working shift when the sand handling process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 0.5 and 6.0 inches of water or a range established during the latest stack test. The Preventative Maintenance plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Condition C.8-Pressure Gauge Specifications, be subject to approval by IDEM, OAM, and be calibrated at least once every six (6) months.

D.7.**7**~~5~~ Visible Emissions Notations

Visible emission notations of the 35,000 cubic feet per minute baghouse and the 65,000 cubic feet per minute baghouse stack exhausts shall be performed once per working shift. A trained employee will record whether emission are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during the part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when abnormal emission is observed.

D.7.**8**~~6~~ Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the sand handling process, mold making process, and all baghouses controlling this process.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.7.**9**~~7~~ Operational Parameters

That the Permittee shall maintain daily records at the stationary source of the following values:

(a) inlet and outlet differential static pressure;

(b) visible observations.

D.7.**10**~~8~~Record Keeping

(a) In order to show compliance with Condition D.7.2, the Permittee shall maintain monthly records of the total amount of sand delivered to the sand handling process.

(b) That the Permittee shall maintain records of baghouse preventative maintenance, parametric monitoring data, visible emissions observations, and all corrective actions taken and the outcome from each. These records shall be made available upon request of the Office of Air Management (OAM) staff.

D.7.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.7.2 shall

be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.8 FACILITY OPERATION CONDITIONS

the core making process with a maximum capacity of 3.35 tons of iron per hour, controlled by a cartridge filter dust collector.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3]

D.8.1 Particulate Matter **(PM) [326 IAC 6-3-2]**

~~That pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the core making process shall not exceed 0.04 pounds per hour.~~ **Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the core making process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.**

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

~~D.8.2 Particulate Matter less than 10 Microns~~

~~Pursuant to 326 IAC 2-8 (FESOP) and 326 IAC 2-2 (Prevention of Significant Deterioration), the PM10 emissions from the core making process shall not exceed 0.04 pounds per hour. This emission limit is necessary to limit the total PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) 326 IAC 2-7 (Part 70 Permits), not applicable.~~

D.8.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the core making process after controls shall not exceed 0.011 pounds per ton of metal processed, equivalent to 0.111 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.8.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the core making process after controls shall not exceed 0.011 pounds per ton of metal processed, equivalent to 0.111 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.8.~~4~~3 Visible Emissions Notations

Visible emission notations of the dust collector stack exhaust shall be performed once per working shift. A trained employee will record whether emission are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80

percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during the part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when abnormal emission is observed.

D.8.~~5~~**4** Preventive Maintenance [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for the core making process.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.8.~~6~~**5** Operational Parameters
That the Permittee shall maintain daily records at the stationary source of the visible emission observations.

D.8.~~7~~**6** Record Keeping
That the Permittee shall maintain records of visible emissions observations, and all corrective actions taken and the outcome from each. These records shall be made available upon request of the Office of Air Management (OAM) staff.

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

The magnesium treatment process, uncontrolled, capacity: 3.35 tons of iron per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.9.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the magnesium treatment process shall not exceed 9.22 pounds per hour when operating at a process weight rate of 3.35 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.9.2 Particulate Matter (PM_{10}) [326 IAC 2-8-4] [326 IAC 2-2]

The PM_{10} emission rate from the magnesium treatment process shall not exceed 1.8 pounds per ton of metal processed, equivalent to 18.22 tons of PM_{10} per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.9.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emission rate from the magnesium treatment process shall not exceed 1.8 pounds per ton of metal processed, equivalent to 18.22 tons of PM per year at the production limit of 20,240 tons of metal melted per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.

D.9.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

There are no specific Compliance Determination Requirements applicable to these emission units.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

SECTION D.10 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

One (1) sand reclaimer, identified as sand reclaimer, equipped with a baghouse and exhausting to Stack P, capacity: 15,000 pounds of sand per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.10.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the one (1) sand reclaimer shall not exceed 15.8 pounds per hour when operating at a process weight rate of 15,000 pounds per hour (7.5 tons per hour).

This limitation is based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.10.2 Particulate Matter (PM_{10}) [326 IAC 2-2][326 IAC 2-8-4]

The PM_{10} emissions from the one (1) sand reclaimer shall be less than 1.50 pounds per hour, equivalent to 6.57 tons per year. Compliance with this condition will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70 Permits), not applicable.

D.10.3 Particulate Matter (PM) [326 IAC 2-2]

The PM emissions from the one (1) sand reclaimer shall be less than 1.50 pounds per hour, equivalent to 6.57 tons per year. Compliance with this condition will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.10.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.10.5 Particulate Matter (PM)

In order to comply with Conditions D.10.1, D.10.2 and D.10.3, the baghouse for PM control shall be in operation at all times when the one (1) sand reclaimer is in operation.

D.10.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 60 and 180 days after achieving the maximum operation rate at which the sand reclaimer will be operated, in order to demonstrate compliance with Conditions D.10.1, D.10.2 and D.10.3, the Permittee shall perform PM and PM_{10} testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.10.7 Visible Emissions Notations

(a) Visible emission notations of the sand reclaimer exhaust (Stack P) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.10.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the sand reclaimer, at least once per shift when the sand reclaimer is in operation when venting to the atmosphere. Unless operated under conditions for which the

Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.10.9 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the sand reclaimer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.10.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.10.11 Record Keeping Requirements

(a) To document compliance with Condition D.10.7, the Permittee shall maintain records of daily visible emission notations of the sand reclaimer stack exhaust (Stack P).

(b) To document compliance with Condition D.10.8, the Permittee shall maintain the following:

(1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle operation.

(2) Documentation of the dates vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FESOP Quarterly Report

Source Name: **OMCO Cast Metals, Inc.**
Source Address: **900 North Main Street, Winchester, Indiana**
Mailing Address: **P.O. Box 462, Winchester, Indiana 47394**
FESOP No.: **135-14182-00007**
Facility: **two (2) electric induction furnaces**
Parameter: **total metal throughput**
Limit: **less than 20,240 tons per twelve (12) consecutive month period**

YEAR: _____

Month	total metal throughput (tons)	total metal throughput (tons)	total metal throughput (tons)
	This Month	Previous 11 Months	12 Month Total

9 **No deviation occurred in this quarter.**

9 **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FESOP Quarterly Report

Source Name: **OMCO Cast Metals, Inc.**
Source Address: **900 North Main Street, Winchester, Indiana**
Mailing Address: **P.O. Box 462, Winchester, Indiana 47394**
FESOP No.: **135-14182-00007**
Facility: **Sand handling process**
Parameter: **The total amount of sand delivered to the sand handling process**
Limit: **Less than 144,014 tons per twelve (12) consecutive month period**

YEAR: _____

Month	Total amount of sand delivered (tons)	Total amount of sand delivered (tons)	Total amount of sand delivered (tons)
	This Month	Previous 11 Months	12 Month Total

9 **No deviation occurred in this quarter.**

9 **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position:

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Note: Entire Permit

On January 1, 2001, the name of the Office of Air Management (OAM) was changed to the Office of Air Quality (OAQ). All references to the ~~Office of Air Management~~ or ~~OAM~~ in the permit have been changed to **Office of Air Quality** or **OAQ**.

Conclusion

The construction of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 135-12267-00007.

Appendix A: Emission Calculations
Baghouse Operations

Company Name: OMCO Cast Metals, Inc.
Address City IN Zip: 900 North Main Street, Winchester, Indiana 47394
FESOP Revision: SPR 135-12267
Plt ID: 135-00007
Reviewer: Edward A. Longenberger
Date: March 12, 2000

Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
	95.0%	0.070	2500	30.0	131	1.50	6.57

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Allowable Rate of Emissions

Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	
15000	7.50	15.8	

Methodology

Allowable Emissions = 4.10(Process Weight Rate)^0.67

Appendix A: Emission Calculations
Total Source Emission Summary
Potential Emissions, Unlimited and Uncontrolled

Company Name: OMCO Cast Metals, Inc.
Address City IN Zip: 900 North Main Street, Winchester, Indiana 47394
FESOP Revision: SPR 135-12267
Plt ID: 135-00007
Reviewer: Edward A. Longenberger
Date: March 12, 2000

Permit Section	Process	Throughput (tons/hr)	PM EF (lbs/ton)	PM10 EF (lbs/ton)		PM Potential (tons/yr)	PM10 Potential (tons/yr)	SO2 Potential (tons/yr)	NOx Potential (tons/yr)	VOC Potential (tons/yr)	CO Potential (tons/yr)	HAPs Potential (tons/yr)
D.3	charge handling	3.35	0.6	0.36		8.80	5.28	0.00	0.00	0.00	0.00	0.00
D.4	innoculation	3.35	1.24	1.24		18.19	18.19	0.00	0.00	0.07	0.00	0.62
D.1	electric induction furnace	3.35	0.9	0.86		13.21	12.62	0.00	0.00	0.00	0.00	0.00
D.5	pouring/casting	3.35	2.8	2.8		41.08	41.08	0.29	0.15	2.05	0.00	0.62
D.6	castings cooling	3.35	1.4	1.4		20.54	20.54	0.00	14.67	1.47	0.00	0.00
D.7	castings shakeout	3.35	3.2	2.24		46.95	32.87	0.00	0.00	17.61	0.00	0.00
D.7	moldmaking	3.35	1.1	1.1		16.14	16.14	0.00	0.00	0.00	0.00	0.00
D.8	coremaking	3.35	1.1	1.1		16.14	16.14	0.00	0.00	0.00	0.00	0.00
D.2	cleaning/finishing	3.35	17	1.7		249.44	24.94	0.00	0.00	0.00	0.00	0.00
D.7	sand handling	30.00	0.65	0.54		85.41	70.96	0.00	0.00	0.00	0.00	0.00
D.9	magnesium treatment	3.35	1.8	1.8		26.41	26.41	0.00	0.00	0.00	0.00	0.62
D.10	new sand reclaimer	7.50	*	*		131.00	131.00	0.00	0.00	0.00	0.00	0.00
insignificant activities	natural gas combustion					0.627	0.707	0.008	6.30	0.377	2.18	0.030
	unpaved roads					1.06	0.37	0.00	0.00	0.00	0.00	0.00
	emergency generator					0.14	0.14	0.13	1.94	0.16	0.42	0.00
	total insignificant					**1.82**	**1.21**	**0.14**	**8.24**	**0.53**	**2.60**	**0.03**
	Total					**675.15**	**417.40**	**0.43**	**23.06**	**21.73**	**2.60**	**1.89**

Appendix A: Emission Calculations
Total Source Emission Summary
Controlled Emissions

Company Name: **OMCO Cast Metals, Inc.**
Address City IN Zip: **900 North Main Street, Winchester, Indiana 47394**
FESOP Revision: **SPR 135-12267**
Plt ID: **135-00007**
Reviewer: **Edward A. Longenberger**
Date: **March 12, 2000**

Permit Section	Process	Throughput (tons/hr)	PM EF (lbs/ton)	PM10 EF (lbs/ton)	Control Eff %	PM Potential (tons/yr)	PM10 Potential (tons/yr)	SO2 Potential (tons/yr)	NOx Potential (tons/yr)	VOC Potential (tons/yr)	CO Potential (tons/yr)	HAPs Potential (tons/yr)
D.3	charge handling	3.35	0.6	0.36	0.00%	8.80	5.28	0.00	0.00	0.00	0.00	0.00
D.4	innoculation	3.35	1.24	1.24	0.00%	18.19	18.19	0.00	0.00	0.07	0.00	0.62
D.1	electric induction furnace	3.35	0.9	0.86	0.00%	13.21	12.62	0.00	0.00	0.00	0.00	0.00
D.5	pouring/casting	3.35	2.8	2.8	0.00%	41.08	41.08	0.29	0.15	2.05	0.00	0.62
D.6	castings cooling	3.35	1.4	1.4	0.00%	20.54	20.54	0.00	14.67	1.47	0.00	0.00
D.7	castings shakeout	3.35	3.2	2.24	98.00%	0.94	0.66	0.00	0.00	17.61	0.00	0.00
D.7	moldmaking	3.35	1.1	1.1	99.00%	0.16	0.16	0.00	0.00	0.00	0.00	0.00
D.8	coremaking	3.35	1.1	1.1	99.00%	0.16	0.16	0.00	0.00	0.00	0.00	0.00
D.2	cleaning/finishing	3.35	17	1.7	99.00%	2.49	0.25	0.00	0.00	0.00	0.00	0.00
D.7	sand handling	30.00	0.65	0.54	99.00%	0.85	0.71	0.00	0.00	0.00	0.00	0.00
none	magnesium treatment	3.35	1.8	1.8	0.00%	26.41	26.41	0.00	0.00	0.00	0.00	0.62
D.9	new sand reclaimer	7.50	*	*		131.00	131.00	0.00	0.00	0.00	0.00	0.00
insignificant activities	natural gas combustion					0.627	0.707	0.008	6.30	0.377	2.18	0.030
	unpaved roads					1.06	0.37	0.00	0.00	0.00	0.00	0.00
	emergency generator					0.14	0.14	0.13	1.94	0.16	0.42	0.00
	total insignificant					**1.82**	**1.21**	**0.14**	**8.24**	**0.53**	**2.60**	**0.03**
	Total					**265.68**	**258.29**	**0.43**	**23.06**	**21.73**	**2.60**	**1.89**

Appendix A: Emission Calculations
Total Source Emission Summary
Potential Emissions, Limited and Controlled

Company Name: **OMCO Cast Metals, Inc.**
Address City IN Zip: **900 North Main Street, Winchester, Indiana 47394**
FESOP Revision: **SPR 135-12267**
Plt ID: **135-00007**
Reviewer: **Edward A. Longenberger**
Date: **March 12, 2000**

Permit Section	Process	Limited Throughput (tons/yr)	PM EF (lbs/ton)	PM10 EF (lbs/ton)	Control Eff %	PM Potential (tons/yr)	PM10 Potential (tons/yr)	SO2 Potential (tons/yr)	NOx Potential (tons/yr)	VOC Potential (tons/yr)	CO Potential (tons/yr)	HAPs Potential (tons/yr)
D.3	charge handling	20240.00	0.6	0.36	0.00%	6.07	3.64	0.00	0.00	0.00	0.00	0.00
D.4	innoculation	20240.00	1.24	1.24	0.00%	12.55	12.55	0.00	0.00	0.07	0.00	0.62
D.1	electric induction furnace	20240.00	0.9	0.86	0.00%	9.11	8.70	0.00	0.00	0.00	0.00	0.00
D.5	pouring/casting	20240.00	2.8	2.8	0.00%	28.34	28.34	0.29	0.15	2.05	0.00	0.62
D.6	castings cooling	20240.00	1.4	1.4	0.00%	14.17	14.17	0.00	14.67	1.47	0.00	0.00
D.7	castings shakeout	20240.00	3.2	2.24	98.00%	0.648	0.453	0.00	0.00	17.61	0.00	0.00
D.7	moldmaking	20240.00	1.1	1.1	99.00%	0.111	0.111	0.00	0.00	0.00	0.00	0.00
D.8	coremaking	20240.00	1.1	1.1	99.00%	0.111	0.111	0.00	0.00	0.00	0.00	0.00
D.2	cleaning/finishing	20240.00	17	1.7	99.00%	1.72	0.172	0.00	0.00	0.00	0.00	0.00
D.7	sand handling	144014.00	0.65	0.54	99.00%	0.468	0.389	0.00	0.00	0.00	0.00	0.00
none	magnesium treatment	20240.00	1.8	1.8	0.00%	18.22	18.22	0.00	0.00	0.00	0.00	0.62
D.9	**new sand reclaimer**	**65700.00**	*****	*****		**6.57**	**6.57**	0.00	0.00	0.00	0.00	0.00
insignificant activities	natural gas combustion					0.627	0.707	0.008	6.30	0.377	2.18	0.030
	unpaved roads					1.06	0.37	0.00	0.00	0.00	0.00	0.00
	emergency generator					0.14	0.14	0.13	1.94	0.16	0.42	0.00
	total insignificant					**1.82**	**1.21**	**0.136**	**8.24**	**0.53**	**2.60**	**0.03**
	Total					**99.90**	**94.64**	**0.426**	**23.1**	**21.7**	**2.60**	**1.89**

METHODOLOGY

PM potential after control = annual throughput (tons/yr) x PM EF (lbs/ton) x (1-control efficiency)

PM10 potential after control = annual throughput (tons/yr) x PM10 EF (lbs/ton) x (1-control efficiency)

SO2, NOx, VOC, CO, HAPs emissions from FESOP 135-5454

* Emissions from proposed sand reclaimer calculated with stated baghouse grain loadings